REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 12, 14-16, 18, and 20-23 are currently pending. No claim amendments are presented, thus no new matter has been added.

In the outstanding Office Action, Claims 12-14 and 20-23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mostafa (U.S. Pub. No. 2002/0073205) in view of Richardson et al. (U.S. Pub No. 2005/0021806, hereafter "Richardson"), Jason, Jr. et al. (U.S. Patent No. 6,728,243, hereafter "Jason"), and Barde et al. (U.S. Pub. No. 2004/0268400, hereafter "Barde"); and Claims 15-16 and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mostafa in view of Richardson, Jason, Barde, and Cooper (U.S. Pub. No. 2004/0003399).

With respect to the rejection of Claim 12 under 35 U.S.C. §103(a), Applicants respectfully traverse this ground of rejection. Claim 12 recites, *inter alia*,

> dividing the streaming video data into high prioritized data which are I-frames, and low prioritized data which are P-frames, wherein the high prioritized data are transmitted via a secure medium, and the low prioritized data are transmitted over a standard channel;...

> wherein the high prioritized data are transmitted via MMS and the low prioritized data are transmitted via streaming, and before a streaming service is initialized, an MMS notification message is initially transmitted to the terminal, the MMS notification message includes buffer data and information about the data flow, the buffer data being initial streaming video data that can be stored on the terminal prior to a user of the terminal starting a streaming service such that the streaming client can start streaming of buffer data without delay.

Applicants submit that Mostafa, Richardson, Jason, and Barde fail to disclose or suggest all of the features of Claim 12.

Mostafa is directed to a communication service in which an MMS notification is sent to a receiving terminal prior to a terminal downloading media from a media server. Mostafa describes that in the conventional art, a Multimedia Message Service (MMS) message is constructed to contain media content, information necessary to describe the media content, and addressing information (see para. [0008]). Mostafa also describes that the MMS message must be downloaded as a whole and therefore the MMS message (including the media content) must be downloaded and stored in the receiving terminal before it can be presented to the user (see para. [0008]-[0009])). Mostafa also describes that "[t]he encapsulation of media content, message description and addressing information in a single entity as proposed *in current MMS specifications is incompatible with the streaming of media content.*" (see para. [0014]).

To overcome the limitations of MMS, Fig. 2 of Mostafa shows a system 20 which includes a communication server which includes a media server 22 and a MMS server 23. Mostafa describes a three phase process of streaming information to the receiving terminal. During phase 1, a sender 21 establishes a streaming session with media server 22 and uploads media content to the server (see para. [0103]). During phase 2, a notification is sent via the MMS server 23 to receiver 24 which indicates that the media content is stored on media server 22 (see para. [0104]). During phase 3, the receiver 24 establishes a streaming session with media server 22 based on information in the notification message and the receiver starts to download and play the media (see para. [0105]).

However, Applicants emphasize that Mostafa explicitly does not describe that the streaming content being divided over two different channels. On the contrary, as described above, Mostafa describes that either the entire media content is encapsulated as a whole in an MMS message as in the conventional art, or as in the invention described by Mostafa, it is streamed separately through a media server.

Therefore, as acknowledged in the Office Action on page 5, Mostafa does not disclose or suggest "dividing the streaming video data into high prioritized data which are I-frames, and low prioritized data which are P-frames," and "wherein the high prioritized data are transmitted via MMS and the low prioritized data are transmitted via streaming…" as defined by Claim 12.

Applicants note that the Office Action relies on Richardson to disclose "dividing the streaming video data into high prioritized data which are I-frames, and low prioritized data which are P-frames."

Richardson is directed to a method of delivering data streams of multiple data types at different priority levels. Fig. 1 of Richardson shows a server 100 linked to a client 200 via networks 300, 500, and 400 (see para. [0016]). Richardson describes that server 100 can provide a video data stream comprising different types of video frames, such as I frames, P frames, and B frames (see para. [0016]). Richardson further describes that after the I frames, B frames, and P frames are separated, the I frames may be transmitted in association with a first TCP/UDP port number, and the P and B frames may be transmitted in association with one or more different TCP/UDP port numbers (see para. [0018]).

Therefore, while Richardson discloses dividing a video stream into I frames and P-frames, it only describes sending such frames over different TCP/UDP port numbers. However, as acknowledged in the Office Action, Richardson does not disclose or suggest that "the high prioritized data are transmitted via MMS and the low prioritized data are transmitted via streaming." On the contrary, Richardson does not explicitly disclose or suggest that either of the streams comprising I-frames or P-frames could be delivered over a mobile network, and Applicants note that MMS is a service standardized for mobile telecommunications.

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Therefore, although <u>Richardson</u> discloses the general concept of dividing a video stream into I-frames and P-frames, the combination of at least <u>Mostafa</u> and <u>Richardson</u> does not disclose or suggest all of "dividing the streaming video data into high prioritized data which are I-frames, and low prioritized data which are P-frames," and "wherein the high prioritized data are transmitted via MMS and the low prioritized data are transmitted via streaming..." as defined by Claim 12.

The Office Action had also acknowledged that <u>Mostafa</u> in view of <u>Richardson, Jason,</u> and <u>Barde</u> fail to disclose or suggest "wherein the high prioritized data are transmitted via MMS and the low prioritized data are transmitted via streaming..." (see Office Action, at page 8). To overcome this deficiency, the Office Action states the following on page 8.

> However, the practice of transmitting high priority data separately from low priority data, as well as the practices of transmitting data via MMS and streaming are commonly known in the art. Also the practice of first transmitting I-frames, which are the reference frames of any video, and are therefore essential to the reproduction of a video, is commonly known. The only difference is the combination of all of the practices together in a single system. By implementing streaming functionality within the framework of existing MMS protocol, a user is provided with complete flexibility to decide whether and when to receive and playback media content.

However, as discussed above, <u>Mostafa</u>'s teaching of the MMS protocol explicitly indicates that streaming data cannot itself be sent within an MMS message because the whole message itself must be downloaded by the receiving terminal before the user of the receiving terminal can view the media content. It is because of these limitations on the MMS protocol that <u>Mostafa</u>'s solution is directed to using a MMS message for notification purposes while streaming the media content separately from MMS. Therefore, there is no teaching in the applied art at all to have the high prioritized data of a video stream transmitted *via MMS* as defined in Claim 12.

As stated in MPEP 2145.X.A:

> However, "[a]ny judgement on obviousness is in a
> sense necessarily a reconstruction based on hindsight
> reasoning, but so long as it takes into account only
> knowledge which was within the level of ordinary skill in
> the art at the time the claimed invention was made *and*
> *does not include knowledge gleaned only from applicant's*
> *disclosure*, such a reconstruction is proper." In re
> McLaughlin 443 F.2d 1392, 1395, 170 USPQ 209, 212
> (CCPA 1971). (Emphasis added).

Thus, Applicants submit that the Office Action has not properly shown why a person of ordinary skill in the art would transmit the high prioritized data of a video stream via the MMS notification message of Mostafa especially given Mostafa's description of the limitations of using streaming data within MMS. Therefore, it appears that the Office Action is using improper hindsight analysis based on the Applicant's disclosure to achieve the above-mentioned features of Claim 12.

Therefore, Applicants submit that for at least the reasons discussed above, the rejection of Claim 12 under 35 U.S.C. §103(a) is improper and must be withdrawn.

Furthermore, as previously presented, it appears that the Office Action acknowledges that while Mostafa discloses an MMS notification message, it does not specifically disclose "the MMS notification message includes buffer data and information about the data flow, the buffer data being initial streaming video data that can be stored on the terminal prior to a user of the terminal starting a streaming service such that the streaming client can start streaming of buffer data without delay." (See Office Action, at page 6). The Office Action relies on Barde to remedy this deficiency of Mostafa (see Office Action, at page 6).

Fig. 1 of Barde shows a network 100 with various client devices and server devices attached thereto. Fig. 2 shows that a client device has a streaming media player 200 with a buffer 206 and a "stitched-reference play-list" 208. The streaming media player is configured to buffer and play back streaming media content in accordance with the stitched

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reference play-list 208 (see para. [0033]). Figs. 3-5 of <u>Barde</u> describe a prior art technique of downloading streaming media, in which a user selects a video to download via an interface shown on Fig. 3, and Fig. 5 shows that the media player will buffer data for about 5 seconds with a blank screen to show to the user. Then, after the buffering, the initial video content itself may just show a still image (such as an FBI warning) for several seconds before the remainder of the video is played (see Fig. 5). Figs. 6-8 show an embodiment of the invention described by <u>Barde</u>. Fig. 6 shows that when a user selects a video to be streamed, a still image (such as an FBI warning) is displayed almost immediately without the initial blank screen being shown while the video content is initially being buffered (see also Fig. 7).

The Office Action had taken the position that it would have been obvious to include the initially buffered data of <u>Barde</u>'s system in the MMS notification message of <u>Mostafa</u>'s system for the advantage of implementing a quick starting video process within <u>Mostafa</u>'s system, that, for example, may allow the user to preview the content sent as a way to further enhance the user's viewing at his/her own discretion. (See Office Action, at page 8).

However, as Applicants previously presented, there is no teaching in the references to make this combination without using hindsight analysis based on the Applicants' disclosure. The MMS notification message of <u>Mostafa</u> is a message for notifying the availability of a streaming content, and as discussed above, ***Mostafa explicitly describes the then-known limitations to incorporating the streaming content into the MMS notification message.*** Given this description in <u>Mostafa, Barde</u> would have to explicitly describe including streaming video data in an MMS notification message in order for a person of ordinary skill in the art to disregard <u>Mostafa</u>'s description of the limitations of MMS and then include a portion of the streaming data in the MMS notification message of <u>Mostafa</u>.

Notwithstanding, Applicants emphasize that <u>Barde</u> does not disclose or suggest including initially buffered data in the MMS notification message of <u>Mostafa</u>.

As previously presented, <u>Barde</u> describes a user first starting to stream the video data by selecting a video to be played, and then receiving a still (static) image to be displayed while video data is initially buffered. Thus, the user in <u>Barde</u> may be notified of the availability of a video by a playlist or an interface shown in Figs. 3 or 11. However, <u>Barde</u> clearly describes that all buffering of data begins *after* the user actually selects the video for download, and thus after any notification of the availability of a video to a user has already been made, and after a user has started a streaming service (see for example, the time line of Fig. 7).

In response to the Applicants' previous arguments, the Office Action states the following.

> "[t]he examiner believes that the reception of the static image of Barde's system is equivalent to a notification of video content to come, as the static image comes first, and is first displayed to the user before the rest of the video is displayed or even received. Via the user interface in Barde, the user is already notified only of video available to be streamed. As multiple videos are listed in a playlist, nothing is being streamed to the user, and therefore the only actual notification of the video being streamed is the static image, i.e., the message, being displayed to the user.

Applicants emphasize that <u>Barde</u> discloses a user selecting a video to be downloaded and then initially receiving a still image to be displayed while the video data is initially being buffered. On the other hand, <u>Mostafa</u> describes sending an MMS notification message over an MMS server, which explicitly notifies a user that streaming video data is available to be streamed to the user over a separate media server. Additionally, the examiner's own analysis states that "[v]ia the user interface in <u>Barde</u>, the user is already notified only of video available to be streamed." Therefore, the static image in <u>Barde</u> does not notify the user of an available video as the MMS notification message of <u>Mostafa</u> does, because the user interface already achieves this purpose. The examiner also states that "therefore the only actual

notification of the video *being* streamed is the static image." However, it is not clear how

this makes the static image of Barde the equivalent to the MMS notification message of

Mostafa since the MMS notification message of Mostafa is sent prior to the streaming of the

video rather than during the streaming of the video (see para. [0098] of Mostafa).

Thus, the mere transmission of the static image in Barde, which is clearly used for the

purposes of preventing a blank screen from being shown while a user waits for video data to

be buffered, does not disclose or suggest at all to modify the MMS notification message of

Mostafa to include initially buffered data of the streaming video data. Applicants emphasize

that the static image in Barde is clearly different in form, function, and timing than the MMS

notification message of Mostafa. Therefore, Applicants' the static image initially sent in

Barde is not the equivalent of an MMS notification message in Mostafa as asserted by the

examiner.

Therefore, Applicants respectfully submit that the combination of Mostafa and Barde

fails to disclose or suggest "before a streaming service is initialized, an MMS notification

message is initially transmitted to the terminal, the MMS notification message includes

buffer data and information about the data flow, the buffer data being initial streaming video

data that can be stored on the terminal prior to a user of the terminal starting a streaming

service such that the streaming client can start streaming of buffer data without delay," as

defined by Claim 12.

Jason, and Cooper have also been considered but fail to remedy the deficiencies of

Mostafa, Richardson, and Barde with regard to Claim 12.

Therefore, Applicants respectfully submit that Claim 12 (and all associated dependent

claims) patentably distinguishes over Mostafa, Richardson, Jason, Barde, and Cooper, either

alone or in proper combination.

Independent Claims 20-22 recite features similar to those of Claim 12 discussed above. Therefore, Applicants respectfully submit that Claims 20-22 (and all associated dependent claims) patentably distinguish over <u>Mostafa</u>, <u>Richardson</u>, <u>Jason</u>, <u>Barde</u>, and <u>Cooper</u>, either alone or in proper combination.

With respect to previously added Claim 23, Claim 23 recites, *inter alia*,

> the MMS notification message being sent to the
> terminal prior to the user of the terminal requesting to start
> a streaming session for receiving the video data.

The Office Action takes the position that <u>Mostafa</u> in view of <u>Richardson</u>, <u>Jason</u>, and <u>Barde</u> discloses the MMS notification message being sent to the terminal prior to the user requesting to start a streaming session for receiving the video data (see Office Action, at page 9, citing para. [0098] and [0107] of <u>Mostafa</u>). However, in order to achieve all of the features of independent Claim 12, the Office Action interpreted the static image described in <u>Barde</u> as being equivalent to the MMS notification message of <u>Mostafa</u>. However, the static image in <u>Barde</u> is clearly sent to the terminal *after* a user requests starting a streaming session for receiving video data. Therefore, the static image in <u>Barde</u> cannot correspond to an "MMS notification message" as further clarified in Claim 23, and therefore the examiner's reliance on <u>Barde</u> for the features of independent Claim 12 in conjunction with dependent Claim 23 is improper.

It appears that in addressing <u>Barde</u>'s application with regard to Claim 23, the Office Action states the following:

> Furthermore, because the streaming of the actual
> video is not started until after the static image, i.e., the
> message, of Barde's system is displayed, it is reasonably
> taught that buffer data, in this case the static image
> message, is sent to the terminal ***prior to the start of the
> actual streaming service***. (Emphasis added).

However, Claim 23 does not merely recite that the MMS notification message is sent to the terminal ***prior to the start*** of the actual streaming service. Claim 23 recites that "the
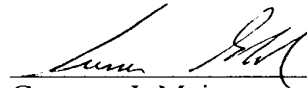
MMS notification message being sent to the terminal *prior to the user of the terminal requesting to start* a streaming session for receiving the video data." Therefore, Applicants submit that the Office Action has not addressed how Barde's static image is sent to the terminal prior to the user of the terminal requesting to start a streaming session for receiving the video data so that it is the equivalent of the claimed "MMS notification message."

Therefore, Applicants submit that dependent Claim 23 patentably distinguishes over Mostafa, Richardson, Jason, Barde, and Cooper, either alone or in proper combination, in addition to the reasons discussed above with regard to independent Claim 12.

Consequently, in light of the above discussion and in view of the present amendment, the outstanding grounds for rejection are believed to have been overcome. The present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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